LITTLE EXAMINED ELEMENTS IN THE WELFARE REFORM DEBATE: THE DIMINISHED MALE AND THE DECREASED VALUE OF EDUCATION IN THE LABOR MARKET

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INTRODUCTION

Since the 1994 national elections, the rhetoric of the welfare debate has been framed in terms of dependency and the culture of poverty versus effects of the changing labor market. In the Contract with America. Gingrich. Armey, and the House Republicans (1994) have argued that government programs designed to give a helping hand to the needy have instead bred illegitimacy, crime, illiteracy, and more poverty. Their solution was to cap welfare spending by removing welfare as an entitlement and to give block grants and certain levels of discretion to the states to develop and administer welfare programs at the state level. Additionally, several consequences designed to engender responsibility were added: Provide no welfare to teen age parents; require beneficiaries to work or to be in training no later than two years after first benefits; grant no more than five years of benefits to anyone during his or her life time; require that paternity and responsibility be established in all illegitimate births before welfare benefits are sought.

If the Contract with America represented one side of the debate, Carville's We're Right. They're Wrong (1996) might be taken to represent the rhetoric on the other side of the debate. Rather than making welfare the cause of poverty, Carville focuses on the changing labor market: High tech jobs have educational requirements that persons with little education or training cannot fill; therefore, welfare reform should include job training and education. However, Carville also includes several welfare reform proposals that either work directly on the labor market or provide supports for persons working for low wages: help with child care, health care for the poor, reduced taxes on the working poor, and an increase in the minimum wage. These proposals do not assume higher paying jobs.

If welfare administration is to be shifted to the state — and possibly the local — level, what might one expect in terms of the rhetoric of welfare reform? Since the "local" area for this author is Tulsa, Oklahoma, the rhetoric and reality of poverty will be more closely scrutinized in the Tulsa area.

As part of the planning process for the City

of Tulsa's Enterprise Community application in 1994, recommendations and findings from over one-hundred existing human service and community development plans provided by governmental and nonprofit organizations were compiled. In these local plans, one finds elements of both sets of rhetoric present at the national level. Several plans are devoted to the prevention of teenage pregnancy and to parenthood training. Other plans are devoted to improving educational attainment and vocational training to better prepare area residents for the labor market. However, poverty is only mentioned fifteen times in the 179 pages of compiled findings and recommendations. Yet, data from the U.S. Census indicates that the poverty rate for the City of Tulsa increased from ten percent in 1979 to fifteen percent in 1989. In the compiled plan recommendations and findings, issues of illegitimate births and family dissolution and issues of education and training are not explicitly linked to the problem of poverty.

If one begins with the issue of poverty rather than framing the issue in terms of welfare reform, welfare reform seems to be only part of the picture. Most of the debate over welfare reform has been aimed at the Aid to Families with Dependent Children program and, therefore, only involves poor families with minor children. Yet from the 1990 U.S. Census, forty-nine percent of poor households headed by persons under the age of 65 in the City of Tulsa in 1989 contained no children under the age of eighteen. These households contained thirty percent of poor persons under 65 years of age. Jencks (1994) found that unattached individuals living on extremely low incomes are the most likely to become homeless. In the City of Tulsa in 1989, data from the 1990 U.S. Census indicate that twenty-five percent of poor persons under 65 years of age were unattached adults. Just as the rhetoric of the national welfare debate has concentrated on poor households headed by single women, the local planning documents have also concentrated on households with minor children headed by single women. In the compilation of recommendations and findings, women are mentioned sixty times while men are only mentioned five times and then only as perpetrators of domestic violence and illegitimate children. Yet, between 1979 and 1989, data from the U. S. Census indicate that the proportion of employed males in the City of Tulsa dropped from seventy-eight percent to seventy-two percent while the proportion of employed females increased from fifty-three percent to fifty-five percent.

In this work, the author argues that the premises of both the national and local rhetoric over welfare reform are fundamentally flawed when tested against a view of poverty in Tulsa. Oklahoma, deduced from a secondary analysis of U. S. Census data. First, the author arques that higher rates of poor single female heads of households in Tulsa are associated with the loss of jobs for males who would most likely be their potential marriage partners. The negative effect of the labor market on males as a cause of poor single female headed households with minor children is totally ignored in both the Contract with America and We're Right. They're Wrong. Second, the author argues that the labor market in Tulsa is becoming more bifurcated with some jobs that pay well and require education and training and other jobs that do not pay well and do not necessarily require education and training. Furthermore, it will be shown that there are already more persons in Tulsa with educational requirements than there are jobs that require them. Thus, while education and training are important to compete for higher income jobs, there will be far more qualified applicants than jobs for the foreseeable future. Neither the Contract with America or We're Right. They're Wrong recognizes that training and education will likely have a minimal impact on poverty.

A VIEW OF POVERTY FROM LITERATURE ON THE LABOR MARKET

In a review of a study on welfare reform, Astone (1995) notes that most sociologists who study poverty probably believe that there will not be a reduction in welfare recipients without an expansion in employment opportunity. The question to be explored is exactly how the labor market is changing and how those changes affect the welfare population that is the usual rhetorical target of welfare reform: poor families — and usually families headed by single females — with dependent children.

It has been widely documented that processes such as down sizing, outsourcing, plant relocation, using contract labor and temporary employees, and antiunionism have reduced employment in the better paying manufacturing and construction industries while increasing employment in the lower paying sales and service industries, have increased the number of hours worked both by forcing overtime and by forcing employment in several part time jobs, and have put downward pressure on wages (Bluestone, Harrison 1982; Garson 1988; Prashad 1994; Schor 1991; Yates 1994). Wilson (1980, 1987) traced how educationally advantaged blacks were able to take advantage of changes in civil rights laws and changes in the labor market to achieve upward mobility. Unfortunately, educationally disadvantaged blacks were negatively affected by the loss of manufacturing and construction jobs, by the flight of jobs to the suburbs, and by the growth of low wage sales and service jobs. Wilson observed that black men were most negatively affected because they tended to be heavily employed in the manufacturing and construction jobs that were being eliminated in the labor market.

Even though it is not widely recognized or discussed, the same dynamic interaction of education, civil rights laws, and changes in the labor market also altered the employment position of women with respect to men. Men, in general, have tended to be employed in the industrial and occupational sectors that have been losing ground. Although the wages of women still lag behind those of men in all occupational categories, both Siegal, Foster, and Cessna (1992) and Yates (1994) found that the income of men has declined over the past two decades while that of women has increased.

While these changes in the labor market can explain increased levels of poverty, one must explore the interaction of the stratification of marriage by education and occupation levels with changes in the labor market to finally link the impact of changes in the labor market on the rhetorical target of welfare reform: poor families --- and usually families headed by single females - with dependent children. Two lines of analysis are instructive. In their study of the American occupational structure, Blau and Duncan (1967) found that men and women tend to marry persons of their own educational levels. Since occupations and educational levels tend to also be stratified, it is reasonable to conjecture that marriage is also stratified by occupation. Thus, if the number of educationally advantaged

| | | 1989 | % change | 1979 | % change | 1969 | l 979-89 change |
|------------------------------|--------|--------|----------|----------------|----------|--------|--------------------|
| Managerial & Professional | Male | 38124 | 6% | 36068 | 33% | 27019 | 2056 |
| | Female | 32476 | 53% | 21182 | 102% | 10508 | 11294 |
| | Total | 70600 | 23% | 57250 | 53% | 37527 | 13350 |
| Technical, Sales, & Admin. | Male | 32655 | 11% | 29388 | 38% | 21337 | 3267 |
| Support | Female | 53279 | 2% | 522 4 4 | 70% | 30704 | 1035 |
| | Total | 85934 | 5% | 81632 | 57% | 52041 | 4302 |
| Services | Male | 13325 | 41% | 9455 | 32% | 7168 | 3870 |
| | Female | 18401 | 14% | 16098 | 16% | 13913 | 2303 |
| | Total | 31726 | 24% | 25553 | 21% | 21081 | 6173 |
| Precision Production, Craft, | Male | 24617 | -16% | 29359 | 32% | 22217 | -4742 |
| & Repair | Female | 2435 | -5% | 2553 | 176% | 926 | -118 |
| | Total | 27052 | -15% | 31912 | 38% | 23143 | -4860 |
| Operators, Fabricators, | Male | 21891 | -17% | 26528 | 19% | 22344 | -4637 |
| Laborers | Female | 5473 | -12% | 6223 | 36% | 4577 | -750 |
| | Total | 27364 | -16% | 32751 | 22% | 26921 | -5387 |
| Total | Male | 130612 | 0% | 130798 | 31% | 100085 | -186 |
| | Female | 112064 | 14% | 98300 | 62% | 60628 | 13764 |

Table I: Employment by Occupation & Sex in 1969, 1979, and 1989 for Tulsa County

Table 2: Employment by Occupational Category by Sex for Persons 16 Years of Age and Over for Tulsa County in 1969, 1979, and 1989 (in percent of occupation)

| | 1970 | | 1980 | | 1990 | |
|-------------------------------------|------|--------|------|--------|------|--------|
| Occupation | Male | Female | Male | Female | Male | Female |
| All occupations | 63 | 37 | 56 | 44 | 54 | 46 |
| All persons | 46 | 54 | 48 | 52 | 47 | 53 |
| Managerial & Professional | 72 | 28 | 63 | 37 | 54 | 46 |
| Technical, Sales, & Admin. support | 41 | 59 | 36 | 64 | 38 | 62 |
| Services | 34 | 66 | 37 | 63 | 42 | 58 |
| Precision production, Craft, Repair | 96 | 4 | 92 | 8 | 91 | 9 |
| Operators, Fabricators, Laborers | 83 | 17 | 81 | 19 | 80 | 20 |

women increased while the number of educationally advantaged males remained constant, one might expect to see an increase in the number of households headed by single females who are not poor.

A second element of the dynamics of the interaction of marriage and the labor market is suggested by Wilson (1987) and Wilkie (1991). They have found that, as the men's participation in the labor force and income decrease, the proportion of poor households headed by single females increases. In general, there has been a rise in the proportion of young mothers who do not marry before the birth of their first child because young men without adequate employment are less likely to marry and because young mothers have little to gain financially from marrying the young fathers of their children. Wilkie found that those who do not

marry tend to be better off in terms of higher educational attainment and lower fertility that those who do. So, the employment status of males is another factor that affects the interaction of the labor market and the stratification of marriage by education and occupation. Thus, if the number of educationally advantaged women increased while the number of employed educationally advantaged males remained constant, one might expect to see an increase in the number of households headed by single females who are not poor. Similarly, if the number of educationally disadvantaged unemployed males increases, one might expect to see an increase in the number of households headed by single females who are poor. Thus, what is attributed to the culture of poverty in the rhetoric of welfare reform unwed women with children - may well be an

| | | 1989 | % change | 1979 | % change | 1969 | 1979-89 change |
|------------------------------|--------|------|----------|------|----------|------------------|-------------------|
| Managerial & Professional | Male | 1009 | 13% | 893 | 89% | 473 | 116 |
| | Female | 1771 | 47% | 1206 | 128% | 530 | 565 |
| | Total | 2780 | 38% | 2009 | 100% | 1003 | 771 |
| Technical, Sales, & Admin. | Male | 1639 | 46% | 1125 | 77% | 634 | 514 |
| Support | Female | 3873 | 18% | 3282 | 218% | 1031 | 591 |
| | Total | 5512 | 25% | 4407 | 165% | 1665 | 1105 |
| Services | Male | 2389 | 56% | 1533 | 7% | 1431 | 856 |
| | Female | 3353 | 14% | 2934 | -6% | 3111 | 419 |
| | Total | 5742 | 29% | 4467 | -2% | 4542 | 1275 |
| Precision Production, Craft, | Male | 1383 | -11% | 1551 | 96% | 7 9 3 | -168 |
| & Repair | Female | 124 | -30% | 176 | 389% | 36 | -52 |
| | Total | 1507 | -13% | 1727 | 108% | 829 | -220 |
| Operators, Fabricators, | Male | 2097 | -30% | 2990 | 29% | 2317 | -893 |
| Laborers | Female | 748 | -15% | 881 | 144% | 361 | -133 |
| | Total | 2845 | -27% | 3871 | 45% | 2678 | -1026 |
| Total | Male | 8517 | 5% | 8092 | 43% | 5648 | 425 |
| | Female | 9869 | 16% | 8479 | 67% | 5069 | 1390 |

Table 3: Black Employment by Occupation & Sex in 1969, 1979, and 1989 for Tulsa County

epiphenomenon of the diminished employment opportunities for males in the labor market.

The second rhetorical assumption of the welfare debate to be examined is that education and skill enhancement is sufficient to take care of the problem of poverty for welfare recipients. If one examines the welfare reform debate (Astone 1995; Gueron, Pauly 1991; Porter 1990: Urban Institute 1994), one finds two diametrically opposed assumptions about education and the labor market. On the one hand, one finds the view that the work place is becoming more technological and that higher levels of education and basic skills will be needed. On the other hand, one finds the view that most increasing occupations are those that require low levels of education, that pay low wages, and that contain relatively high levels of part-time work. For example, Nissen and Seybold (1994) cite a Department of Labor study that found that eight of the top ten fastest growing occupations are in services or retail sales. The only two occupations that fit the high skilled image are registered nurse and systems analyst. Thus, regardless of the educational level of the overall population, more and more jobs being offered in the labor market will not pay a living wage for many families.

There is no question that higher education is necessary to be able to compete for jobs in

occupations that pay higher wages and offer full-time work. But, if there are generally more persons with educational requirements for higher paying occupations than there are persons in those occupations, how effective will education be as a poverty reduction strategy among welfare recipients?

METHODS

The U.S. Census contains employment by occupation cross classified by sex and race for counties in 1969, 1979, and 1989 for persons 16 years of age and over. Thus, one can use employment classified by occupation to explore how the industrial reorganization that occurred between 1969 and 1989 differentially affected men and women in Tulsa County. Tulsa County, rather than the City of Tulsa, is utilized as the basic unit of analysis because Tulsa County contains over ninety-eight percent of the City of Tulsa and because the City limit boundaries of the City of Tulsa changed from decade to decade. Since farming, forestry, and fishing occupations only account for less than one percent of employment in Tulsa County, it was left out of the analysis. Otherwise, the Census classifies occupations as: 1) managerial and professional specialty occupations, 2) technical, sales, and administrative support occupations, 3) service occupations, 4) precision production, craft, and repair occupations, and 5) operators, fabricators, and

Table 4: Mean Earnings for Men and Women Age 16 to 64 Working in Tulsa, Creek, and Osage Counties in 1979 and 1989 (in 1989 Dollars)

| Occupation | Sex | 1979 | 1989 | % Change |
|--------------|-------|----------|------------------|-------------|
| Manager | Men | \$41,455 | \$47,377 | 4% |
| 0 | Women | \$18,175 | \$23,988 | 32% |
| Professional | Men | \$36,600 | \$4 4,738 | 22% |
| | Women | \$16,595 | \$22,397 | 35% |
| Technical | Men | \$28,133 | \$29,921 | 6% |
| | Women | \$18,338 | \$20,017 | 9% |
| Sales | Men | \$29,335 | \$32,010 | 9% |
| | Women | \$10,262 | \$13,273 | 29% |
| Adm. | Men | \$25,723 | \$23,506 | -9% |
| Support | Women | \$13,996 | \$15,707 | 12% |
| Services | Men | \$16,000 | \$14,679 | -8% |
| | Women | \$7,299 | \$8,820 | 21% |
| Crafts | Men | \$26,759 | \$24,021 | -10% |
| | Women | \$13,058 | \$19,539 | 50% |
| Laborer | Men | \$21,192 | \$18,945 | -11% |
| | Women | \$11,332 | \$12,763 | 13% |

laborers.¹ The number of persons employed in Tulsa County in each occupational category by sex is contained in Table 1. To specify the differential effects of the changing occupational pattern on men and women in Tulsa County, the data from Table 1 for each occupational category was expressed as a percent of employment by sex in each category for 1969, 1979, and 1989. The use of percentage comparison allows one to compare populations of different sizes over time (Shryock et al 1976). The results are contained in Table 2. The same classification as Table 1 was carried out for black males and females and is reported in Table 3.

To explore the differential rate of change in earnings between women and men, mean earnings for women and men who were 16 to 64 years of age and working in Tulsa, Creek, and Osage Counties were calculated for 1979 and 1989 from the 1980 and 1990 U.S. Census Public Use Microdata Sets (5% sample) and expressed in 1989 dollars by adjusting the 1979 mean earnings by the CPI for urban consumers indexed on a 1982-1984 baseline. The results are found on Table 4. Tulsa, Creek, and Osage Counties are used as the unit of analysis for the Microdata Set data because it is the area for which the data is reported both in the 1980 and the 1990 U.S. Census Public Use Microdata Sets (5% sample). The City of Tulsa and Tulsa County contain most of the employment in the three county area.

To test Blau and Duncan's (1967) findings that men and women tend to marry persons of their own educational levels, one can use the 1990 U.S. Census PUMS (5% sample) for Tulsa County to test Blau and Duncan's finding for Tulsa. If one cross classifies all married couples in Tulsa County with heads of households from sixteen to sixty-four years of age by sex and educational levels, if one uses the marginal distribution of married couples by sex and by educational levels to create an expected distribution, and if one calculates the difference between the actual and expected levels as a fraction of the expected level, one will obtain the results found in Table 5. In Table 5, any value greater than zero (0) represents proportionally more respondents than one would expect from the marginal distribution alone.

As noted earlier, if marriage is stratified by educational levels and if occupations are stratified by educational levels, it is reasonable to conclude that marriage is also stratified by occupations. To test this in Tulsa County, the sample used to create Table 5 was used to create Table 6. The values in Table 6 were created by cross classifying all married couples in Tulsa County with heads of households from sixteen to sixty-four years of age by sex and occupations, by using the marginal distribution of married couples by sex and by occupations to create an expected distribution, and by calculating the difference between the actual and expected levels as a fraction of the expected level. If marriage is stratified by occupations, one would expect over representation concentrated along the diagonal of the table.

It will be seen in Tables 5 and 6 below that marriage in Tulsa County is stratified by education and by occupations related to the office or professional work environment (managers, professionals, technical, and administrative support) and by occupations related to the manual or service work environment (sales, services, craft, and laborer). As will be seeen in Table 3 below, occupations related to the office or professional work environment tend to pay more than occupations related to the manual or service work environment. Over a period of time, if there is a growing imbalance of women to men in occupations related to the office or professional work environment, one would expect a growth in the proportion of

Table 5: The Actual Distribution Minus the Expected Distribution of Married Couples with Heads from 16 to 64 Years of Age in Tulsa County by Males and Females by Educational Attainment Level Divided by the Expected Distribution

| | Men | | | | | | |
|-------------------------|----------------|-------------|--------------|----------------------------|--|--|--|
| Women | No High School | High School | Some College | Bachelor Degree or More | | | |
| No High School | 1.6177 | 0.0330 | -0.4584 | -0.8386 | | | |
| High School | -0.0010 | 0.4560 | -0.0771 | -0.5654 | | | |
| Some College | -0.5359 | -0.2413 | 0.4695 | 0.1965 | | | |
| Bachelor Degree or More | -0.8501 | -0.6765 | -0.1607 | 1.9357 | | | |

| Table 6: The Actual Distribution Minus the Expected Distribution of Married Couples with Heads |
|--|
| from 16 to 64 Years of Age in Tulsa County by Males and Females by Occupations Divided by the |
| Expected Distribution |

| | | | | | Men | | | | |
|---------|-------|-------|-------|-------|-------|---------|-------|-------|-------|
| Women | UNEMP | MNGER | PROFS | TECH | SALES | ADM SUP | SRVCS | CRAFT | LABOR |
| UNEMP | 1.64 | -0.11 | -0.15 | -0.13 | -0.15 | -0.16 | -0.29 | -0.01 | 0.05 |
| MNGER | -0.59 | 0.66 | 0.19 | 0.37 | 0.20 | 0.18 | -0.14 | -0.18 | -0.33 |
| PROFS | -0.53 | 0.42 | 1.33 | 0.12 | -0.01 | 0.01 | -0.20 | -0.34 | -0.40 |
| TECH | -0.31 | -0.19 | 0.18 | 1.15 | -0.03 | 0.08 | -0.12 | 0.08 | -0.16 |
| SALES | -0.33 | -0.11 | -0.27 | -0.11 | 0.62 | -0.09 | -0.03 | 0.01 | 0.02 |
| ADM SUP | -0.54 | 0.17 | -0.04 | 0.11 | 0.19 | 0.18 | -0.01 | 0.02 | -0.15 |
| SRVCS | -0.02 | -0.44 | -0.46 | -0.29 | -0.34 | -0.10 | 0.62 | 0.18 | 0.34 |
| CRAFT | 0.06 | -0.37 | -0.57 | -0.16 | -0.30 | 0.02 | 0.00 | 0.37 | 0.24 |
| LABOR | 0.05 | -0.49 | -0.68 | -0.26 | -0.47 | -0.10 | -0.07 | 0.22 | 0.69 |

families headed by single persons — most of whom are female — who are not poor. On the other hand, if there is a growing imbalance of women to men in occupations related to the manual or service work environment, one would expect a growth in the proportion of families headed by single persons who are poor. To test for this, changes in the number of women and men in different occupations between 1969 and 1979 and between 1979 and 1989 will be compared to changes in the proportion of families that are headed by singles and are either poor or not poor during the same time periods to determine if the two phenomenon covary in the hypothesized direction.

Wilson (1987) and Wilkie's (1991) findings imply that the birth rate of unwed women can be accounted for by the availability of employed, i.e., marriageable, men. Using 1980 and 1990 U. S. Census data for the City of Tulsa, if one compares the number of employed men sixteen years or older to the number of women in this age group, one finds that thirty-one percent of women in this age group in 1980 and thirty-six percent in 1990 did not have actual or potential employed mates. Thus, one would expect the proportion of never married women with children to increase.

To test this hypothesis in the City of Tulsa,

a modified marriage rate for women 15 to 34 years of age in 1980 and 1990 was calculated by dividing the number of ever married women in the age group by the number of employed men in the age group to test for the stability of the propensity of women to be interested in marriage and family creation. Using the birth rate of ever married women as an indicator of the general propensity of women to have children, an expected birth rate among never married women was calculated for 1980 and 1990 and compared to the actual birth rate among never married women. Assuming that the proportion of women in the age group that could be married to employed men was the same in 1990 as it was in 1980, the number of additional women who would fail in the ever married category in 1990 if employed men were available was calculated. Assuming that these women who would have fallen in the ever married category had children at the ever married rate rather than the never married rate, an expected birth rate among never married women was calculated for 1990. If this rate is comparative to the ever married birth rate, one could argue that the change in birth rates among unwed women can be accounted for by changes in the number of employed men.

Table 7: Percent of Workers Employed Less than 50 Weeks per Year or Less than 35 Hours Per Week in Tulsa, Creek, and Osage Counties by Occupation

| | cupation |
|------------------------|-------------------------------|
| Occupation | Percent Employed Part-Time |
| Manager | 10% |
| Professional | 15% |
| Technical | 12% |
| Sales | 25% |
| Administrative Support | 19% |
| Services | 28% |
| Crafts | 12% |
| Laborers | 19% |

To explore the diminished value of education, the median educational attainment for all occupations was obtained from the 1980 and 1990 U. S. Census Public Use Microdata Sets (5% sample) for Tulsa, Creek, and Osage Counties. Then, the number of persons with the median educational attainment for each occupation was compared to the number of persons in that occupation to determine if there were greater or fewer persons with occupational credentials than there were occupational positions available in the labor market. If there were more persons with educational credentials than there were positions in the labor market, education as a strategy for welfare reform is problematic.

FINDINGS

From Table 1, it is evident that all occupational categories increased between 1969 and 1979 for Tulsa County. In Tulsa County, precision production, craft, and repair occupations decreased over 15 percent between 1979 and 1989. Operators, fabricators, and laborers decreased over 16 percent between 1979 and 1989. Between 1979 and 1989, managerial and professional specialty occupations and service occupations—occupations which tend to be on the opposite ends of the wage scale—grew by about 24 percent each. During the same period, technical, sales, and administrative support occupations grew by over 5 percent.

In Table 2, one can see that the two occupational categories losing employment between 1979 and 1989 in Table 1—precision production, craft, & repair occupations and operators, fabricators, and laborers—are the occupations containing the highest concentration of male workers. Thus, what has Page 37

traditionally been "men's" work is dying. One can see in Table 2 an increase between 1979 and 1989 in the proportion of men in technical. sales, administrative support, and service occupations as the occupations which traditionally employed them decreased. The one occupational category which traditionally employed proportionally more men which grew between 1979 and 1989 was managerial and professional specialty occupations. Yet, the growth in employment during this period in this occupational category was fundamentally a growth in female employment. While males employed in managerial and professional specialty occupations increased by about six percent between 1979 and 1989, females employed in this occupational category increased by fiftyfour percent.

Another area in which there was a shift from male dominance to female dominance in employment is in full-time (35 hours per week or more) and part-time (less than 35 hours per week) employment. Data from the U. S. Census indicate that, between 1979 and 1989 in the City of Tulsa, the number of males and females employed part-time increased about fourteen percent. But, during the same period, the number of males employed full-time decreased about five percent while the number of females employed full-time increased about three percent.

If one examines changes in the proportion of males and females 16 years of age and older employed in the City of Tulsa between 1979 and 1989, it is not surprising to find that the proportion of employed males dropped from 78 percent to 72 percent while the proportion of employed females increased from 53 percent to 55 percent.

If one examines the change between 1979 and 1989 by occupations in Table 1—which reports employment for all persons in Tulsa County classified by occupation and sex—and in Table 3—which reports Black employment classified by occupation and sex—one can see that the effect of the loss of employment as operators, fabricators, and laborers has been most significant for Black males.

Managerial and professional specialty occupations have increased the most in absolute terms between 1979 and 1989 — 13350 — and have grown almost at the same rate as service occupations. From Table 1, it is apparent that women have been added to the ranks of managerial and professional specialty occupations at almost nine times the rate of men between 1979 and 1989. From Table 1 and Table 3, Black women have been added to managerial and professional specialty occupations at a rate less than but close to all women. Black women have been added at almost eight times the rate of all men and at more than three times the rate of Black men. Black men have been added at twice the rate of all men.

The growth rates for males and females in technical, sales, and administrative support occupations has reversed between the period from 1969 to 1979 and the period from 1979 to 1989. From 1969 to 1979, women were added to this occupational category at approximately twice the rate of men. From 1979 to 1989, men were added to this category at a higher rate than women. This reversal appears in Table 1 for all persons as well as in Table 3 for the Black population.

Finally, service occupations have increased at the highest rate between 1979 and 1989 — 24 percent — and have grown in absolute terms during the period at the second highest number behind managerial and professional specialty occupations — 6173. Both between 1969 and 1979 and between 1979 and 1989, the growth rate of male employment in service occupations both for all persons and for Blacks was higher than the growth rate of female employment in service occupations.

From Table 4, it appears that women only earned from \$0.35 (Sales) to \$0.65 (Technical) for every dollar earned by men in 1979. Between 1979 and 1989, the rate of real wage growth for women was positive and greater than that of men in all occupational categories. The real wages of men employed in administrative support (-9%), services (-8%), crafts (-10%), and laborers (-11%) decreased between 1979 and 1989. As a result, the wage gap between women and men decreased to a range of \$0.42 (Sales) to \$0.81 (Crafts) per dollar earned by men in 1989.

These findings generally confirm national trends. Siegal et al (1992) found that the median personal income of American men has declined over the past two decades while the median personal income of women has increased. Specifically, median earnings for males dropped fourteen percent between 1973 and 1990 while the median earnings for females increased by twenty-two percent.

As expected from Blau and Duncan (1967), it is clear from Table 5 that there is a tendency for people to marry people with a similar education. With one exception — administrative support — the diagonal of Table 6 contains the most over represented cells for each occupation. Furthermore, there is a general clustering of positive values among occupations related to the office or professional work environment and among occupations related to the manual or service work environment. This stratification probably intensifies the upward mobility of families taking advantage of growth in managerial and professional specialty occupations and the downward mobility of families affected by the decline of craft occupations and laborers and the increase of service and retail service occupations.

From Wilson's (1987) and Wilkie's (1991) findings, one would expect the proportion of never married women with children to increase. The situation found in the City of Tulsa is similar to the situation described by Wilson and Wilkie for the United States. If one compares the number of men sixteen years or older who are employed to the number of women in this age group, one finds that thirty-one percent of women in this age group in 1980 and thirty-six percent in 1990 did not have actual or potential employed mates.

To explore this hypothesis in the City of Tulsa, a modified marriage rate for women 15 to 34 years in 1980 was calculated by dividing the number of ever married women in the age group by the number employed men, i.e., marriageable, in the age group. A modified marriage rate of 886 ever married women per 1000 employed men was found. A rate of 869 ever married women per 1000 employed men was found in 1990. This rate, while decreased, seems fairly stable.

The birth rate for ever married women of age 15 to 34 increased 7.3 percent from 1260 to 1352 per 1000 women between 1980 and 1990. If one takes the birth rate of ever married women as an indicator of the general propensity to have children, one would expect a shift in birth rate among never married women proportionally from 142 to 152 per 1000 never married women between 1980 and 1990. Instead, the birth rate for 15 to 34 year never married women increased from 142 to 271 per 1000 never married women.

Now, if one assumes that the proportion of women in the age group that could be married to employed men was the same in 1990 as it was in 1980, one would expect an additional 2,657 women to be in the category of the ever married. Following Wilkie's (1991) observation, if one assumes that they had the same propensity as ever married women to have children but had no suitable mate such that they had children at the ever married rate, the rate of birth for the remaining never married women 15 to 34 years in 1990 would be 153 per 1000 never married women instead of 271 per 1000 never married women. This is approximately the birth rate one would expect if ever married and never married birth rates changed in the same proportion between 1980 and 1990. This tends to confirm Wilkie's observation that the increased propensity for unwed women to have children is influenced by the imbalance in the number of women and the number of employed men.

In Tables 5 and 6, it was shown that marriage is stratified by education and by occupations related to the office or professional work environment and by occupations related to the manual or service work environment. Between 1969 and 1979 in Tulsa County, occupations related to the office or professional environment added 25.114 more women than men: occupations related to the manual or service work environment added 8,155 more men than women. Between 1969 and 1979, the proportion of families that were headed by singles (almost all of whom are female headed) and that were not poor increased from seven percent of families to twelve percent of families. The proportion of families that were headed by singles and that were poor remained constant at six percent between 1969 and 1979. This is what one might expect given the increased imbalance between women and employed men in occupations related to the office or professional work environment. Between 1979 and 1989, 6,966 more women than men were added to white collar positions; 5,509 men lost positions in blue collar and service occupations while 1,435 women gained such positions. Between 1979 and 1989, the proportion of families that were headed by singles and that were not poor remained constant at twelve percent. The proportion of families that were headed by singles and that were poor increased from six to nine percent. Again, this is what one might expect given the increased imbalance between women and employed men in occupations related to the manual or service work environment.

The problem of finding a mate who is employed to marry can be seen by looking at the proportion of women 16 years of age or older compared to the number of employed men of the same age. Among women 16 years or older in the City of Tulsa according to the 1990 U.S. Census, 34 percent of white women, 52 percent of Black women, 40 percent of Native American women, and 20 percent of Asian women do not have available employed mates. If one separates out the census tracts in the City of Tulsa that have fifty-one percent or more families with incomes less than the median income for the Tulsa MSA (\$37,500) and examines these areas, 36 percent of white women, 56 percent of Black women, 46 percent of Native American women, and 43 percent of Asian women do not have available employed mates. If one examines the remaining census tracts that are not low income, 33 percent of white women, 39 percent of Black women, 35 percent of Native American women. and 13 percent of Asian women do not have available employed mates. These imbalances could easily account for differential rates of births among single female heads of households among different race.

Turning to examine the balance between education and occupational levels, 57,250 persons were employed in managerial and professional specialty occupations in Tulsa County in 1979 according to the U.S. Census. From the 1980 and 1990 U. S. Census Public Use Microdata Sets (5% sample) for Tulsa, Creek, and Osage Counties (PUMS/INCOG area), the median educational attainment in 1979 and 1989 for managers was some college and for professionals was a bachelor degree. There were 2,506 more persons employed in these occupations in 1979 than there were persons holding bachelor degrees or more.

In 1979, there were 81,632 persons employed in technical, sales, and administrative support occupations. In 1979 and 1989, the median educational attainment for persons in technical occupations was some college. In 1979, the median educational attainment for persons in sales and administrative support occupations was a high school education. By 1989 the median educational attainment for persons in these occupations was some college. There were 26,989 more persons employed in these occupations in 1979 than there were persons with some college. Thus, in 1979, a person could occupy a position in one of these three occupational categories without the average educational attainment.

By 1989 in Tulsa County, the relation between the number of positions occupied by persons and the number of persons with the

prerequisite educational attainment for these two clusters of occupational categories was reversed from the situation in 1979. In 1989. there were 9,623 more persons holding college degrees or more than were employed in managerial and professional specialty occupations. There were 32,698 more persons having some college than were employed in technical, sales, and administrative support occupations. A recent study conducted by Deloitte and Touche for the Metropolitan Tulsa Chamber of Commerce found that more than 50,000 Tulsa workers were employed in jobs that do not utilize their skills and education and that do not pay enough for their training and education (Maurer 1996).

In 1989, services, crafts, and laborers were the only occupational categories with median educational attainment at the level of high school graduates. As noted earlier, craft occupations are decreasing in number. This would indicate that the main occupations to which persons with little education can gain entry are those with higher levels of part-time employment such as services and laborers. It is apparent from Table 7 that the general cluster of service occupations, sales, administrative support, and laborers are the most densely populated with part-time jobs. These are precisely the occupational categories usually classified as secondary labor market jobs.

The fastest growing occupational clusters are on the opposites side of the educational and earnings divide from each other: managerial and professional specialty occupations on one hand and sales and service occupations on the other. Thirty-four percent of the change in employment from 1990 through 1994 in the Tulsa area are in the first cluster. Forty-one percent are in the second cluster. The remainder are in the middle. Thus, regardless of the educational level of the overall population, more and more jobs being offered in the labor market will not pay a living wage for many families.

There is no question but that higher education is necessary to be able to compete for jobs in occupations that pay higher wages and offer full-time work. But, as noted earlier, there are generally more persons with educational requirements for higher paying occupations than there are persons in those occupations. The proportion of males and females 25 years of age and over with more than a high school education has continually improved from 1970 to 1990 for both the population as a whole and for Blacks. If one examines educational achievement levels for persons employed in Tulsa, Creek, and Osage Counties in the 1980 and 1990 U. S. Census PUMS, one finds that each ten-year age cohort born between 1935 and 1965 increased the proportion of persons in that cohort with some college or higher educations by at least ten percent during the ten year period.

The combined trends of growing lowerpaying jobs and generally increasing levels of education among the work force raise questions about the effectiveness of education as an antipoverty strategy.

CONCLUSION

If one uses Tulsa, Oklahoma, to test the assumptions of the rhetoric of the welfare reform debate, it has been shown that key assumptions of both Republicans and Democrats are fundamentally flawed.

First, negative effects of the reorganization of the labor market have directly affected men more negatively than women. However, women are indirectly affected by having a reduced pool of employed males with livable wages as potential or actual marriage partners. Because marriage partners tend to be stratified by educational level and occupational cluster, women employed in low paying occupations were more negatively affected than women in higher paying occupations. Furthermore, it was argued that the loss of potential or actual employed men with livable wages could easily account for increased levels of poor families with dependent children headed by single females. Thus, the labor market and not necessarily a culture of dependency could account for higher levels of households on AFDC.

Second, there are already more persons with educational requirements than there are positions requiring those requirements. The labor market continues to produce employment on both ends of the skill and wage spectrum. Moreover, the tactics of the routinization of jobs to deskill work, of outsourcing, and of contract and temporary labor is being applied to mental work as well as to menial work. Thus, education and training do not necessarily translate to higher paying jobs as they did before the mid 1970s.

NOTES

 These classifications are essentially comparable between the U. S. Census of 1990 and 1980.
However, they are not comparable with the occupational classification scheme contained in the

1970 U. S. Census. To increase the comparability of the 1970 U. S. Census with the 1980 U. S. Census and 1990 U.S. Census, the 1970 U.S. Census data was reclassified in the following manner: Professional, technical, and kindred workers less health workers (except practitioners) and technicians (except health) in the 1970 U.S. Census were classified as managerial and professional specialty occupations; sales workers, clerical and kindred workers, health workers (except practitioners), and technicians (except health) in the 1970 U.S. Census were classified as technical, sales, and administrative support occupations; service workers and private household workers in the 1970 U. S. Census were classified as service occupations; craftsmen, foremen, and kindred workers in the 1970 U.S. Census were classified as precision production, craft, and repair occupations; and operatives, transport equipment operatives, and laborers (except farm) in the 1970 U.S. Census were classified as operators, fabricators, and laborers.

REFERENCES

- Astone NM 1995 Welfare: yesterday and today Contemporary Sociology 24 1 6-7
- Blau PM, OD Duncan 1967 The American Occupa-tional Structure NY: Wiley Bluestone B, B Harrison 1982 The Deindustrialization
- of America NY: Basic Books
- Carville J 1996 We're Right, They're Wrong NY: Random House
- Garson B 1988 The Electronic Sweatshop NY: Penguin
- Gingrich N, D Armey House Republicans 1994 Confract with America NY: New York Times Books
- Gueron JM, E Pauly 1991 From Welfare to Work NY: Russell Sage Foundation

- Jencks C 1994 The Homeless Cambridge: Harvard U Press
- Maurer M 1996 Tulsa work detailed: survey sees underemployment, low-skill labor Tulsa World Aug 22 E-1
- Nissen B. P Seybold 1994 Labor and monopoly capital in the labor education context Monthly Rev 46636-44
- Porter KH 1990 Making Jobs Work: What the Research Says About Effective Employment Programs for AFDC Recipients Washington, DC: Center of Budget and Policy Priorities
- Prashad V 1994 Contract labor: the latest stage of illiberal capitalism Monthly Review 46 5 19-26
- Schor J B 1991 The Overworked American NY: Basic Books
- Shryock HS, JS Siegel and Associates 1976 The Methods and Materials of Demography NY: Academic Press
- Siegel MA, CD Foster, CB Cessna 1992 Social Welfare: Help or Hinderance Wylie TX: Information Plus
- Urban Institute 1994 Self-Sufficiency and the Low-Wage Labor Market: A Reality Check for Welfare Reform: Summary of the April 12-14, 1994 Conference Washington, DC: The Urban Institute Wilkie JR 1991 The decline in men's labor force
- participation and income and the changing structure of family economic support J Marriage and Family 53 111-22
- Wilson WJ 1980 The Declining Significance of Race: Blacks and Changing American Institutions 2nd ed Chicago: U Chicago Press
- 1987 The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy Chicago: U Chicago Press
- Yates MD 1994 Longer Hours, Fewer Jobs NY: Monthly Review Press

